IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

- 1. (Currently Amended) A composition comprising:
 - a) a first fusion polypeptide comprising:
- i) a first domain comprising a protein transduction moiety domain, the protein transduction domain moiety comprising a membrane transport function providing for intracellular delivery of the first fusion polypeptide; and
 - ii) a second domain comprising a heterologous polypeptide;
 - b) a second fusion polypeptide comprising:
- i) a first domain comprising a protein transduction moiety domain, the protein transduction domain moiety comprising a membrane transport function providing for intracellular delivery of the second fusion polypeptide; and
 - ii) a second domain comprising a fusogenic polypeptide.
- 2. (Currently Amended) The composition of claim 1, wherein the protein transduction moiety domain is selected from the group consisting of a polypeptide comprising a herpesviral VP22 protein; a polypeptide comprising a human immunodeficiency virus (HIV) TAT protein; a polypeptide comprising a homeodomain of an Antennapedia protein (Antp HD), and functional fragments thereof.
- 3. (Currently Amended) The composition of claim 2, wherein a TAT protein functional fragment comprises SEQ ID NO:[[I]] 1 from amino acid 47-57.

- 4. (Original) The composition of claim 1, wherein the heterologous polypeptide is a therapeutic or diagnostic polypeptide.
- 5. (Original) The composition of claim 4, wherein the diagnostic polypeptide is an imaging agent.
- 6. (Original) The composition of claim 4, wherein the therapeutic polypeptide modulates cell proliferation.
- 7. (Original) The composition of claim 6, wherein the modulation inhibits cell proliferation.
- 8. (Original) The composition of claim 7, wherein the therapeutic agent is a suicide inhibitor or a tumor suppressor protein.
- 9. (Original) The composition of claim 8, wherein the suicide inhibitor is thymidine kinase.
- 10. (Original) The composition of claim 8, wherein the tumor suppressor protein is p53.
- 11. (Original) The composition of claim 6, wherein the modulation increases cell proliferation.

- 12. (Original) The composition of claim 11, wherein the therapeutic agent is selected from the group consisting of SV40 small T antigen, SV40 large T antigen, adenovirus E1A, papilloma virus E6, papilloma virus E7, Epstein-Barr virus, Epstein-Barr nuclear antigen-2, human T-cell leukemia virus-1 (HTLV-1), HTLV-1 tax, herpesvirus saimiri, mutant p53, myc, c-jun, c-ras, c-Ha-ras, h-ras, v-src, c-fgr, myb, c-myc, n-mye, v-myc, and Mdm2.
- 13. (Currently Amended) The composition of claim 1, wherein the fusogenic polypeptide is selected from the group consisting of the M2 protein of influenza A viruses; peptide analogs of the influenza virus hemagglutinin; the HEF protein of the influenza C virus; the transmembrane glycoprotein of filoviruses; the transmembrane glycoprotein of the rabies virus; the transmembrane glycoprotein (G) of the vesicular stomatitis virus; the amino-terminal 33 amino acids of the F1 component of the fusion polypeptide of the Sendai virus; the E1 component of the transmembrane glycoprotein of the Semliki forest virus; the gp37 component of the fusion polypeptide of the human respiratory syncytial virus (RSV); the fusion polypeptide of the measles virus; the fusion polypeptide of the Newcastle disease virus; the fusion polypeptide of the visna virus; the p15E component of the fusion polypeptide of murine leukemia virus; the gp21 component of the fusion polypeptide of the HTL virus; and the fusion polypeptide of the simian immunodeficiency virus (SIV), wherein the fusogenic polypeptide causes destabilization of a cell membrane.
- 14. (Original) The composition of claim 1, wherein the fusogenic polypeptide comprises a sequence selected from SEQ ID NO:2 and SEQ ID NO:3.

- 15. (Original) A pharmaceutical or diagnostic composition comprising the composition of claim 1.
- 16. (Currently Amended) A kit comprising a vessel or vessels compartmentalized to receive the composition of claim 1 containing a) a first fusion polypeptide comprising: i) a first domain comprising a protein transduction moiety, the transduction moiety comprising a membrane transport function; and ii) a second domain comprising a heterologous polypeptide; and b) a second fusion polypeptide comprising: i) a first domain comprising a protein transduction moiety, the transduction moiety comprising a membrane transport function; and ii) a second domain comprising a fusogenic polypeptide.
- 17. (Canceled)
- 18. (Original) An article of manufacture comprising, packaged together: a) a vessel containing the composition of claim 1; and b) instructions for use of the composition in a therapeutic or diagnostic method.
- 19-30. (Canceled)
- 31. (Currently Amended) A fusion polypeptide comprising consisting of a protein transduction domain selected from the group consisting of a polypeptide comprising a herpesviral VP22 protein; a polypeptide comprising a human immunodeficiency virus (HIV) TAT protein; a polypeptide comprising a homeodomain

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of an Antennapedia protein (Antp HD), and functional fragments thereof, and a fusogenic domain, the fusogenic domain comprising a membrane destabilization function, and a heterologous molecule, wherein the heterologous molecule is operably linked to the fusogenic domain or the protein transduction domain.

- 32. (Canceled)
- 33. (Currently Amended) The fusion polypeptide of claim 3132, wherein a TAT protein functional fragment comprises SEQ ID NO:1 from amino acid 47-57.
- 34. (Currently Amended) The fusion polypeptide of claim 31, wherein the fusogenic polypeptide is selected from the group consisting of the M2 protein of influenza A viruses; peptide analogs of the influenza virus hemagalutinin; the HEF protein of the influenza C virus; the transmembrane glycoprotein of filoviruses; the transmembrane glycoprotein of the rabies virus; the transmembrane glycoprotein (G) of the vesicular stomatitis virus; the amino-terminal 33 amino acids of the F1 component of the fusion polypeptide of the Sendai virus; the E1 component of the transmembrane glycoprotein of the Semliki forest virus; the gp37 component of the fusion polypeptide of the human respiratory syncytial virus (RSV); the fusion polypeptide of the measles virus; the fusion polypeptide of the Newcastle disease virus; the fusion polypeptide of the visna virus; the p15E component of the fusion polypeptide of murine leukemia virus; the gp21 component of the fusion polypeptide of the HTL virus; and the fusion polypeptide of the simian immunodeficiency virus (SIV), wherein the fusogenic polypeptide causes destabilization of a cell membrane.

- 35. (Original) The fusion polypeptide of claim 31, wherein the fusogenic polypeptide comprises a sequence selected from SEQ ID NO:2 and SEQ ID NO:3.
- 36. (Previously Presented) The fusion polypeptide of claim 31, wherein the fusion polypeptide further comprises a heterologous molecule operably linked to the protein transduction domain or the fusogenic domain.